Release notes for ENDF/B Development photoat-100_Fm_000 evaluation



October 13, 2016

- checkr Warnings:
 - 1. A previous error halted parsing of the current section $MAT=9920,\ MF=1,\ MT=451\ (1)$: Parsing stopped

ERROR(S) FOUND IN MAT=9920, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 170 TO 209

- checkr Errors:
 - 1. A variable is outside the allowed ENDF range MAT=9920, MF=1, MT=451 (0): Variable range

ERROR(S) FOUND IN MAT=9920, MF= 1, MT=451
MOD = 3 OUT OF RANGE 0 - 1 RECORD NUMBER 170

2. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=501 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=501
SECTION 23/501 NOT IN DIRECTORY RECORD NUMBER

3. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=502 (0): Directory (b)

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ERROR(S) FOUND IN MAT=9920, MF=23, MT=502
SECTION 23/502 NOT IN DIRECTORY RECORD NUMBER 1292

4. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=504 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=504
SECTION 23/504 NOT IN DIRECTORY RECORD NUMBER 1810

5. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=515 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=515
SECTION 23/515 NOT IN DIRECTORY RECORD NUMBER 1851

6. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=9920,\ MF=23,\ MT=516\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=516
SECTION 23/516 NOT IN DIRECTORY RECORD NUMBER 1886

7. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=517 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=517 SECTION 23/517 NOT IN DIRECTORY

RECORD NUMBER 1941

8. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 522 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=522 SECTION 23/522 NOT IN DIRECTORY

RECORD NUMBER 1983

9. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 534 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=534 SECTION 23/534 NOT IN DIRECTORY

RECORD NUMBER 2487

10. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 535 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=535 SECTION 23/535 NOT IN DIRECTORY

RECORD NUMBER 2506

11. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=536 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=536 SECTION 23/536 NOT IN DIRECTORY

RECORD NUMBER 2528

12. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=537 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=537 SECTION 23/537 NOT IN DIRECTORY

RECORD NUMBER 2550

13. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=538 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=538 SECTION 23/538 NOT IN DIRECTORY

RECORD NUMBER 2573

14. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=539 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=539 SECTION 23/539 NOT IN DIRECTORY

RECORD NUMBER 2598

15. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=9920,\ MF=23,\ MT=540\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=540 SECTION 23/540 NOT IN DIRECTORY

RECORD NUMBER 2624

16. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 541 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=541 SECTION 23/541 NOT IN DIRECTORY

RECORD NUMBER 2651

17. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 542 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=542 SECTION 23/542 NOT IN DIRECTORY

RECORD NUMBER 2679

18. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 543 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=543 SECTION 23/543 NOT IN DIRECTORY

RECORD NUMBER 2707

19. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=544 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=544 SECTION 23/544 NOT IN DIRECTORY

RECORD NUMBER 2733

20. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=545 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=545 SECTION 23/545 NOT IN DIRECTORY

RECORD NUMBER 2763

21. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=546 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=546 SECTION 23/546 NOT IN DIRECTORY

RECORD NUMBER 2792

22. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=547 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=547 SECTION 23/547 NOT IN DIRECTORY

RECORD NUMBER 2829

23. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=9920,\ MF=23,\ MT=548\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=548 SECTION 23/548 NOT IN DIRECTORY

RECORD NUMBER 2874

24. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 549 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=549 SECTION 23/549 NOT IN DIRECTORY

RECORD NUMBER 2932

25. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=550 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=550 SECTION 23/550 NOT IN DIRECTORY

RECORD NUMBER 2993

26. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 551 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=551 SECTION 23/551 NOT IN DIRECTORY

RECORD NUMBER 3020

27. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=552 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=552 SECTION 23/552 NOT IN DIRECTORY

RECORD NUMBER 3059

28. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=553 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=553 SECTION 23/553 NOT IN DIRECTORY

RECORD NUMBER 3092

29. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=554 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=554 SECTION 23/554 NOT IN DIRECTORY

RECORD NUMBER 3146

30. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=555 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=555 SECTION 23/555 NOT IN DIRECTORY

RECORD NUMBER 3201

31. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=9920,\ MF=23,\ MT=556\ (0)$: Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=556 SECTION 23/556 NOT IN DIRECTORY

RECORD NUMBER 3284

32. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 9920, MF = 23, MT = 559 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=559 SECTION 23/559 NOT IN DIRECTORY

RECORD NUMBER 3368

33. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=560 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=560 SECTION 23/560 NOT IN DIRECTORY

RECORD NUMBER 3403

34. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=561 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=561 SECTION 23/561 NOT IN DIRECTORY

RECORD NUMBER 3444

35. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=23, MT=570 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=23, MT=570 SECTION 23/570 NOT IN DIRECTORY

RECORD NUMBER 3488

36. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=27, MT=502 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=27, MT=502 SECTION 27/502 NOT IN DIRECTORY

RECORD NUMBER 3525

37. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=27, MT=504 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=27, MT=504 SECTION 27/504 NOT IN DIRECTORY

RECORD NUMBER 3574

38. Missing a section in directory so your directory is messed up. This error will break everything else MAT=9920, MF=27, MT=505 (0): Directory (b)

ERROR(S) FOUND IN MAT=9920, MF=27, MT=505 SECTION 27/505 NOT IN DIRECTORY

RECORD NUMBER 3624

39. Missing a section in directory so your directory is messed up. This error will break everything else $MAT=9920,\ MF=27,\ MT=506\ (0)$: Directory (b)

- linear Errors:
 - 1. Negative cross section found 0: Neg. Sig(E)

Minimum Cross Section----- 1.0000E-10 (

- fudge-4.0 Warnings:
 - 1. generic warning message reaction label 0: Fm + gamma [coherent] / Product: gamma (Error # 0): Warning

WARNING: coherentScattering is not a valid distribution component for 2-body reaction

2. FIXME: Generic fudge unimplemented message reaction label 0: Fm + gamma [coherent] / Product: gamma (Error # 2): Generic unimp (c)

WARNING: Checking not yet implemented for pointwise type data

3. generic warning message reaction label 1: Fm + gamma [incoherent] / Product: gamma (Error # 0): Warning

WARNING: incoherentScattering is not a valid distribution component for 2-body reaction

4. FIXME: Generic fudge unimplemented message reaction label 1: Fm + gamma [incoherent] / Product: gamma (Error # 2): Generic unimp (c)

WARNING: Checking not yet implemented for piecewise type data

5. Cross sections do not correctly sum up properly according to an ENDF (or equivalent) sumrule summedReaction label 31: total (Error # 0): Sumrule

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 100.00%

6. Cross sections do not correctly sum up properly according to an ENDF (or equivalent) sumrule summedReaction label 33: photoelectric absorption (Error # 0): Sumrule

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 79.40%

- fudge-4.0 Errors:
 - 1. Calculated and tabulated thresholds don't agree reaction label 0: Fm + gamma [coherent] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!

2. 2-body reaction not in center-of-mass frame reaction label 0: Fm + gamma [coherent] / Product: gamma (Error # 1): 2-body not in COM

WARNING: 2-body reaction not in center-of-mass frame!

3. Calculated and tabulated thresholds don't agree reaction label 1: Fm + gamma [incoherent] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!

4. 2-body reaction not in center-of-mass frame reaction label 1: Fm + gamma [incoherent] / Product: gamma (Error # 1): 2-body not in COM

WARNING: 2-body reaction not in center-of-mass frame!

5. Energy range of data set does not match cross section range reaction label 1: Fm + gamma [incoherent] / Product: gamma / Distribution incoherentScattering - piecewise: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (0.0 -> 1000000000.0) vs (1.0 -> 1e+11)

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2.044e6 eV!

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1.022e6 eV!

8. Calculated and tabulated thresholds don't agree reaction label 4: e- + Fm1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 142680. eV!

9. Calculated and tabulated thresholds don't agree reaction label 5: e- + Fm2s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 27622. eV!

10. Calculated and tabulated thresholds don't agree reaction label 6: e- + Fm2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 26792. eV!

11. Calculated and tabulated thresholds don't agree reaction label 7: e- + Fm2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 20894. eV!
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- 12. Calculated and tabulated thresholds don't agree reaction label 8: e- + Fm3s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7179.7 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 9: e- + Fm3p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6784. eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 10: e- + Fm3p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5392.6 eV!
- 15. Calculated and tabulated thresholds don't agree reaction label 11: e- + Fm3d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4760.8 eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 12: e- + Fm3d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4492.7 eV!
- 17. Calculated and tabulated thresholds don't agree reaction label 13: e- + Fm4s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1925.8 eV!
- 18. Calculated and tabulated thresholds don't agree reaction label 14: e- + Fm4p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1739. eV!
- 19. Calculated and tabulated thresholds don't agree reaction label 15: e- + Fm4p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1359.6 eV!
- 20. Calculated and tabulated thresholds don't agree reaction label 16: e- $+ Fm4d3/2 / Cross \ section$: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1061.8 eV!
- 21. Calculated and tabulated thresholds don't agree reaction label 17: e- + Fm4d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 994.36 eV!
- 22. Calculated and tabulated thresholds don't agree reaction label 18: e- + Fm4f5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 600.52 eV!

- 23. Calculated and tabulated thresholds don't agree reaction label 19: e- + Fm4f7/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 581.62 eV!
- 24. Calculated and tabulated thresholds don't agree reaction label 20: e- + Fm5s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 446.11 eV!
- 25. Calculated and tabulated thresholds don't agree reaction label 21: e- + Fm5p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 368.06 eV!
- 26. Calculated and tabulated thresholds don't agree reaction label 22: e- + Fm5p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 269.17 eV!
- 27. Calculated and tabulated thresholds don't agree reaction label 23: e- + Fm5d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 153.89 eV!
- 28. Calculated and tabulated thresholds don't agree reaction label 24: e- + Fm5d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 139.29 eV!
- 29. Calculated and tabulated thresholds don't agree reaction label 25: e- + Fm5f5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 12.29 eV!
- 30. Calculated and tabulated thresholds don't agree reaction label 26: e- + Fm5f7/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10.18 eV!
- 31. Calculated and tabulated thresholds don't agree reaction label 27: e- + Fm6s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 64.8499999999999 eV!
- 32. Calculated and tabulated thresholds don't agree reaction label 28: e- + Fm6p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 41.27 eV!
- 33. Calculated and tabulated thresholds don't agree reaction label 29: e- + Fm6p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 25.77 eV!

- 34. Calculated and tabulated thresholds don't agree reaction label 30: e- + Fm7s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.85 eV!
- 35. Calculated and tabulated thresholds don't agree summedReaction label 31: total / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1. eV!
- 36. Calculated and tabulated thresholds don't agree summedReaction label 32: pair product / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1.022e6 eV!
- 37. Calculated and tabulated thresholds don't agree summedReaction label 33: photoelectric absorption / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.85 eV!

- xsectplotter Warnings:
 - 1. Encountered runtime warning in xsect plotter or Fudge or matplotlib $\it Error: Runtime Warning$

stderr while processing crossSection

/usr/local/lib/python2.7/site-packages/matplotlib-1.3.1-py2.7-linux-x86_64.egg/matplotlib/pyplot.py:412: Runtime ... [3 more lines]